

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/753,143

DATE: 12/20/2001

TIME: 12:41:26

Input Set : N:\Crf3\RULE60\09753143.txt

Output Set: N:\CRF3\12202001\I753143.raw

SEQUENCE LISTING

3 (1) GENERAL INFORMATION:

5 (i) APPLICANT: NATHAN A. ELLIS, JAMES GERMAN, AND JOANNA
6 GRODEN8 (ii) TITLE OF INVENTION: METHODS FOR DIAGNOSIS AND TREATMENT
9 OF BLOOM'S SYNDROME

11 (iii) NUMBER OF SEQUENCES: 78

13 (iv) CORRESPONDENCE ADDRESS:

14 (A) ADDRESSEE: AMSTER, ROTHSTEIN & EBENSTEIN

15 (B) STREET: 90 PARK AVENUE

16 (C) CITY: NEW YORK

17 (D) STATE: NEW YORK

18 (E) COUNTRY: U.S.A.

19 (F) ZIP: 10016

21 (v) COMPUTER READABLE FORM:

22 (A) MEDIUM TYPE: 3.5 INCH 1.44 Mb STORAGE DISKETTE

23 (B) COMPUTER: IBM PC COMPATIBLE

24 (C) OPERATING SYSTEM: MS-DOS

25 (D) SOFTWARE: ASCII

27 (vi) CURRENT APPLICATION DATA:

C--> 28 (A) APPLICATION NUMBER: US/09/753,143

C--> 29 (B) FILING DATE: 02-Jan-2001

31 (vii) PRIOR APPLICATION DATA:

32 (A) APPLICATION NUMBER: 09/175,828

33 (B) FILING DATE: 1998-10-20

35 (viii) ATTORNEY/AGENT INFORMATION:

36 (A) NAME: ELIZABETH A. BOGOSIAN

37 (B) REGISTRATION NUMBER: 39,911

38 (C) REFERENCE/DOCKET NUMBER: 63475/65

40 (ix) TELECOMMUNICATION INFORMATION:

41 (A) TELEPHONE: (212) 697-5995

42 (B) TELEFAX: (212) 286-0854 or 286-0082

43 (C) TELEX: TWX 710-581-4766

45 (2) INFORMATION FOR SEQ ID NO: 1:

47 (i) SEQUENCE CHARACTERISTICS:

48 (A) LENGTH: 19

49 (B) TYPE: NUCLEIC ACID

50 (C) STRANDEDNESS: SINGLE

51 (D) TOPOLOGY: LINEAR

W--> 53 (ii) MOLECULE TYPE:

54 (A) DESCRIPTION: OTHER NUCLEIC ACID

56 (iii) HYPOTHETICAL: YES

58 (iv) ANTI-SENSE: NO

60 (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

62 GGTGGCGACG ACTCCTGGA 19

65 (2) INFORMATION FOR SEQ ID NO: 2:

67 (i) SEQUENCE CHARACTERISTICS:

ENTERED

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```
68          (A) LENGTH: 19
69          (B) TYPE: NUCLEIC ACID
70          (C) STRANDEDNESS: SINGLE
71          (D) TOPOLOGY: LINEAR
W--> 73      (ii) MOLECULE TYPE:
74          (A) DESCRIPTION: OTHER NUCLEIC ACID
76      (iii) HYPOTHETICAL: YES
78          (iv) ANTI-SENSE: NO
80          (ix) FEATURE:
81              (A) NAME/KEY:
82              (B) LOCATION:
83              (C) IDENTIFICATION METHOD:
84              (D) OTHER INFORMATION:
86          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 2:
87              ACCAGACCAA CTGGTAATG      19
91 (2) INFORMATION FOR SEQ ID NO: 3:
93      (i) SEQUENCE CHARACTERISTICS:
94          (A) LENGTH: 20
95          (B) TYPE: NUCLEIC ACID
96          (C) STRANDEDNESS: SINGLE
97          (D) TOPOLOGY: LINEAR
W--> 99      (ii) MOLECULE TYPE:
100          (A) DESCRIPTION: OTHER NUCLEIC ACID
102      (iii) HYPOTHETICAL: YES
104          (iv) ANTI-SENSE: NO
106          (ix) FEATURE:
107              (A) NAME/KEY:
108              (B) LOCATION:
109              (C) IDENTIFICATION METHOD:
110              (D) OTHER INFORMATION:
112          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 3:
113              ATGGTAGCGA CCGGCGCTCA      20
117 (2) INFORMATION FOR SEQ ID NO: 4:
119      (i) SEQUENCE CHARACTERISTICS:
120          (A) LENGTH: 20
121          (B) TYPE: NUCLEIC ACID
122          (C) STRANDEDNESS: SINGLE
123          (D) TOPOLOGY: LINEAR
W--> 125      (ii) MOLECULE TYPE:
126          (A) DESCRIPTION: OTHER NUCLEIC ACID
128      (iii) HYPOTHETICAL: YES
130          (iv) ANTI-SENSE: NO
132          (ix) FEATURE:
133              (A) NAME/KEY:
134              (B) LOCATION:
135              (C) IDENTIFICATION METHOD:
136              (D) OTHER INFORMATION:
138          (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 4:
139              CCGTCAGTAT CCGCGGAATT      20
```

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```
143 (2) INFORMATION FOR SEQ ID NO: 5:
145   (i) SEQUENCE CHARACTERISTICS:
146       (A) LENGTH: 21
147       (B) TYPE: NUCLEIC ACID
148       (C) STRANDEDNESS: SINGLE
149       (D) TOPOLOGY: LINEAR
W--> 151   (ii) MOLECULE TYPE:
152       (A) DESCRIPTION: OTHER NUCLEIC ACID
154   (iii) HYPOTHETICAL: YES
156   (iv) ANTI-SENSE: NO
158   (ix) FEATURE:
159       (A) NAME/KEY:
160       (B) LOCATION:
161       (C) IDENTIFICATION METHOD:
162       (D) OTHER INFORMATION:
164   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 5:
166       TTGTGGTGTGTT GGGTAGAGGT T 21
169 (2) INFORMATION FOR SEQ ID NO: 6:
171   (i) SEQUENCE CHARACTERISTICS:
172       (A) LENGTH: 15
173       (B) TYPE: NUCLEIC ACID
174       (C) STRANDEDNESS: SINGLE
175       (D) TOPOLOGY: LINEAR
W--> 177   (ii) MOLECULE TYPE:
178       (A) DESCRIPTION: OTHER NUCLEIC ACID
180   (iii) HYPOTHETICAL: YES
182   (iv) ANTI-SENSE: NO
184   (ix) FEATURE:
185       (A) NAME/KEY:
186       (B) LOCATION:
187       (C) IDENTIFICATION METHOD:
188       (D) OTHER INFORMATION:
190   (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 6:
192       GCCGCCGGCA CCAAC 15
195 (2) INFORMATION FOR SEQ ID NO: 7:
197   (i) SEQUENCE CHARACTERISTICS:
198       (A) LENGTH: 22
199       (B) TYPE: NUCLEIC ACID
200       (C) STRANDEDNESS: SINGLE
201       (D) TOPOLOGY: LINEAR
W--> 203   (ii) MOLECULE TYPE:
204       (A) DESCRIPTION: OTHER NUCLEIC ACID
206   (iii) HYPOTHETICAL: YES
208   (iv) ANTI-SENSE: NO
210   (ix) FEATURE:
211       (A) NAME/KEY:
212       (B) LOCATION:
213       (C) IDENTIFICATION METHOD:
214       (D) OTHER INFORMATION:
```

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```

216      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 7:
218      CCTCAGTCAA ATCTATNTGC TC      22
221 (2) INFORMATION FOR SEQ ID NO: 8:
223      (i) SEQUENCE CHARACTERISTICS:
224          (A) LENGTH: 23
225          (B) TYPE: NUCLEIC ACID
226          (C) STRANDEDNESS: SINGLE
227          (D) TOPOLOGY: LINEAR
W--> 229      (ii) MOLECULE TYPE:
230          (A) DESCRIPTION: OTHER NUCLEIC ACID
232      (iii) HYPOTHETICAL: YES
234      (iv) ANTI-SENSE: NO
236      (ix) FEATURE:
237          (A) NAME/KEY:
238          (B) LOCATION:
239          (C) IDENTIFICATION METHOD:
240          (D) OTHER INFORMATION:
242      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 8:
244      GCCATCACCG GAACAGAAGG AAA      23
247 (2) INFORMATION FOR SEQ ID NO: 9:
249      (i) SEQUENCE CHARACTERISTICS:
250          (A) LENGTH: 22
251          (B) TYPE: NUCLEIC ACID
252          (C) STRANDEDNESS: SINGLE
253          (D) TOPOLOGY: LINEAR
W--> 255      (ii) MOLECULE TYPE:
256          (A) DESCRIPTION: OTHER NUCLEIC ACID
258      (iii) HYPOTHETICAL: YES
260      (iv) ANTI-SENSE: NO
262      (ix) FEATURE:
263          (A) NAME/KEY:
264          (B) LOCATION:
265          (C) IDENTIFICATION METHOD:
266          (D) OTHER INFORMATION:
268      (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 9:
270      TCTTCTGGAG GAGGTGGAAC AA      22
273 (2) INFORMATION FOR SEQ ID NO: 10:
275      (i) SEQUENCE CHARACTERISTICS:
276          (A) LENGTH: 19
277          (B) TYPE: NUCLEIC ACID
278          (C) STRANDEDNESS: SINGLE
279          (D) TOPOLOGY: LINEAR
W--> 281      (ii) MOLECULE TYPE:
282          (A) DESCRIPTION: OTHER NUCLEIC ACID
284      (iii) HYPOTHETICAL: YES
286      (iv) ANTI-SENSE: NO
288      (ix) FEATURE:
289          (A) NAME/KEY:
290          (B) LOCATION:

```

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```

291         (C) IDENTIFICATION METHOD:
292         (D) OTHER INFORMATION:
294         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 10:
296         GGATCCTGGT TCCGTCCGC      19
299 (2) INFORMATION FOR SEQ ID NO: 11:
301         (i) SEQUENCE CHARACTERISTICS:
302             (A) LENGTH: 21
303             (B) TYPE: NUCLEIC ACID
304             (C) STRANDEDNESS: SINGLE
305             (D) TOPOLOGY: LINEAR
W--> 307         (ii) MOLECULE TYPE:
308             (A) DESCRIPTION: OTHER NUCLEIC ACID
310         (iii) HYPOTHETICAL: YES
312         (iv) ANTI-SENSE: NO
314         (ix) FEATURE:
315             (A) NAME/KEY:
316             (B) LOCATION:
317             (C) IDENTIFICATION METHOD:
318             (D) OTHER INFORMATION:
320         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 11:
322         CAACTAGAAC GTCAGTCAGC C      21
325 (2) INFORMATION FOR SEQ ID NO: 12:
327         (i) SEQUENCE CHARACTERISTICS:
328             (A) LENGTH: 22
329             (B) TYPE: NUCLEIC ACID
330             (C) STRANDEDNESS: SINGLE
331             (D) TOPOLOGY: LINEAR
W--> 333         (ii) MOLECULE TYPE:
334             (A) DESCRIPTION: OTHER NUCLEIC ACID
336         (iii) HYPOTHETICAL: YES
338         (iv) ANTI-SENSE: NO
340         (ix) FEATURE:
341             (A) NAME/KEY:
342             (B) LOCATION:
343             (C) IDENTIFICATION METHOD:
344             (D) OTHER INFORMATION:
346         (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 12:
348         GACTTTTCCT TCAGTGAACC TC      22
351 (2) INFORMATION FOR SEQ ID NO: 13:
353         (i) SEQUENCE CHARACTERISTICS:
354             (A) LENGTH: 21
355             (B) TYPE: NUCLEIC ACID
356             (C) STRANDEDNESS: SINGLE
357             (D) TOPOLOGY: LINEAR
W--> 359         (ii) MOLECULE TYPE:
360             (A) DESCRIPTION: OTHER NUCLEIC ACID
362         (iii) HYPOTHETICAL: YES
364         (iv) ANTI-SENSE: NO
366         (ix) FEATURE:

```

VERIFICATION SUMMARY

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Input Set : N:\Crif3\RULE60\09753143.txt

Output Set : N:\CRF3\12202001\I753143.raw

L:28 M:220 C: Keyword misspelled or invalid format, [(A) APPLICATION NUMBER:]
L:29 M:220 C: Keyword misspelled or invalid format, [(B) FILING DATE:]
L:53 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=1
L:73 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=2
L:99 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=3
L:125 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=4
L:151 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=5
L:177 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=6
L:203 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=7
L:229 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=8
L:255 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=9
L:281 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=10
L:307 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=11
L:333 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=12
L:359 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=13
L:385 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=14
L:412 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=15
L:439 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=16
L:465 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=17
L:490 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=18
L:515 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=19
L:540 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=20
L:566 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=21
L:591 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=22
L:617 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=23
L:643 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=24
L:670 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=25
L:695 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=26
L:721 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=27
L:747 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=28
L:773 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=29
L:799 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=30
L:825 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=31
L:851 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=32
L:877 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=33
L:903 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=34
L:929 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=35
L:955 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=36
L:981 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=37
L:1008 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=38
L:1034 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=39
L:1060 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=40
L:1086 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=41
L:1112 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=42
L:1138 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=43
L:1164 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=44
L:1190 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=45
L:1216 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=46

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L:1242 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=47
L:1268 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=48
L:1294 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=49
L:1320 M:246 W: Invalid value of Alpha Sequence Header Field, [MOLECULE TYPE:], SeqNo=50